

IN THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently amended) A verification system for a packet call processing operation of a mobile telephone, the verification system comprising:

a terminal for transmitting a packet call control signal to the mobile telephone to establish a packet call for communication of packets with the mobile telephone, generating an internet protocol packet after establishment of the packet call, transmitting the internet protocol packet to the mobile telephone, and determining data processing characteristics of the mobile telephone based on a response packet received from the mobile telephone; and

a packet service simulator for receiving the packet call control signal from the mobile telephone to verify the packet call processing operation between the terminal and the mobile telephone, and transmitting the internet protocol packet received from the mobile telephone to an external network and transmitting a corresponding response packet received from the external network to the mobile telephone, thereby enabling the mobile telephone to transmit the corresponding response packet to the terminal;

wherein the terminal executes a network application including Telnet, file transfer protocol (FTP), or the Web to generate an internet protocol packet and transmit the internet protocol packet to the mobile telephone, and receives a response packet to the internet protocol packet from the mobile telephone to verify network data processing operations of the mobile telephone.

2. (Previously presented) The verification system as claimed in claim 1, wherein an internet protocol address is individually assigned to the terminal, the mobile telephone, and the packet service simulator.

3. (Original) The verification system as claimed in claim 1, wherein the mobile telephone is linked to terminal via a local area network (LAN), the packet service simulator being linked to the external network.

4. (Previously presented) The verification system as claimed in claim 1, wherein the packet service simulator analyzes the packet call control signal received from the mobile telephone, generates the corresponding response packet when the response control message is successfully processed, and transmits it to the mobile telephone to establish the packet call.

5. (Previously presented) The verification system as claimed in claim 2, wherein the packet service simulator comprises:

a packet transmitter for transmitting data having an internet protocol address of the terminal to the external network in an Ethernet packet format; and

a packet receiver for receiving the corresponding response packet destined for the internet protocol address of the terminal from the external network and transmitting the corresponding response packet to the mobile telephone, thereby enabling the mobile telephone to transfer the corresponding response packet to the terminal.

6. (Previously presented) The verification system as claimed in claim 2, wherein the packet service simulator receives the corresponding response packet destined for the internet protocol access of the terminal in response to an address resolution protocol (ARP) request for the internet protocol address of the terminal, sent from the external access network, using its physical address.

7. (Canceled)

8. (Original) The verification system as claimed in claim 1; wherein the terminal is linked to the mobile telephone via a universal serial bus (USB).

9. (Original) The verification system as claimed in claim 1, wherein the terminal communicates packets with the mobile telephone according to a point-to-point protocol (PPP).

10. (Original) The verification system as claimed in claim 1, wherein a physical layer of the mobile telephone comprises an Ethernet, and a media control layer of the mobile telephone is modified into a module for supporting the Ethernet.

11. (Currently amended) A verification method for a packet call processing operation of a mobile telephone, in which the mobile telephone is connected to a terminal and a packet service simulator that is linked to an external network, the verification method comprising:

upon the mobile telephone receiving a packet call control signal for verification of a packet data service from the terminal and transmitting packet call control signal, the packet service simulator analyzing the packet call control signal received from the mobile telephone and verifying the packet call processing operation between the mobile telephone and the terminal;

the terminal executing a network application, generating an internet protocol packet and transmitting the internet protocol packet to the mobile telephone;

upon receiving the internet protocol packet having an internet protocol address of the terminal from the mobile telephone, the packet service simulator transmitting the internet protocol packet to an external network;

the packet service simulator receiving a response packet destined for the terminal from the external network and transmitting the response to the mobile telephone; and
upon receiving the response packet from the mobile telephone, the terminal verifying an operation of the network application based on the response packet and preparing statistic data for the received packet;

the terminal requesting cancellation of a packet call established between the mobile telephone and the packet service simulator;

the mobile telephone transmitting a call cancellation control message corresponding to the cancellation request to the packet service simulator; and

the packet service simulator canceling the packet call to the mobile telephone based on the received control message and transmitting a corresponding response message to the mobile telephone to inform that the packet call is cancelled.

12. (Currently amended) The verification method as claimed in claim 11, further comprising:

assigning an internet protocol address individually to the terminal, the packet service simulator and the mobile telephone; and

the packet service simulator broadcasting an address resolution protocol (ARP) packet, including an internet protocol address of the terminal and a physical address of the simulator, to the external network and recording it on a gateway for connection to the external network so as to receive a packet having the address of the terminal;

13. (Previously presented) The verification method as claimed in claim 11, wherein the step of the terminal transmitting the internet protocol packet to the mobile telephone comprises:

establishing point-to-point protocol (PPP) access to the mobile telephone; and

transmitting the internet protocol packet to the mobile telephone according to a PPP protocol.

14. (Previously presented) The verification system as claimed in claim 11, wherein the step of the packet service simulator receiving the response packet destined for the terminal from the external network comprises:

transmitting to the external network the ARP response packet having a physical address of the simulator and an internet protocol address of the terminal to the ARP request packet requesting the physical address of the terminal sent from the external network; and
receiving the response packet destined for the terminal.

15. (Cancel)

16. (Original) The verification method as claimed in claim 11, wherein the mobile telephone is linked to the packet service simulator via a local area network (LAN) and to the terminal via a universal serial bus (USB).

17. (New) A mobile phone having a packet call processing operation, the mobile phone comprising:

a packet data processor for processing an internet protocol packet, transmitting the internet protocol packet to the packet service simulator and transferring a corresponding response packet from the packet service simulator to the terminal;

a packet call control signal processor for processing a packet call control signal received from the terminal and transmitting the packet call control signal to the packet service simulator; and

a point-to-point protocol (PPP) communication for communicating with the terminal according to the PPP access protocol,

wherein the terminal executes a network application including Telnet, file transfer protocol (FTP), or the Web to generate an internet protocol packet and transmit the internet protocol packet to the mobile telephone, and receives a response packet to the internet protocol packet from the mobile telephone to verify network data processing operations of the mobile telephone.

18. (New) The mobile phone as claimed in claim 17, wherein an internet protocol address is individually assigned to the terminal, the mobile telephone, and the packet service simulator.

19. (New) The mobile phone as claimed in claim 17, wherein the mobile telephone, which is linked to the packet service simulator via a local area network (LAN), is linked to terminal via a universal serial bus (USB).

20. (New) The mobile phone as claimed in claim 17, wherein the packet service simulator analyzes the packet call control signal received from the mobile telephone, generates the corresponding response packet when the packet call control signal is successfully processed, and transmits it to the mobile telephone to establish the packet call.

21. (New) The mobile phone as claimed in claim 18, wherein the packet service simulator comprises:

a packet transmitter for transmitting data having an internet protocol address of the terminal to the external network in an Ethernet packet format; and

a packet receiver for receiving the corresponding response packet destined for the internet protocol address of the terminal from the external network and transmitting the corresponding response packet to the mobile telephone, thereby enabling the mobile telephone to transfer the corresponding response packet to the terminal.

22. (New) The mobile phone as claimed in claim 18, wherein the packet service simulator receives the corresponding response packet destined for the internet protocol access of the terminal in response to an address resolution protocol (ARP) request for the internet protocol address of the terminal, sent from the external access network, using its physical address.

23. (New) The mobile phone as claimed in claim 17, wherein the terminal communicates packets with the mobile telephone according to the PPP communication.